



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

08/952,990 04/09/98 LEIJON

M 70556-2/8238

MM42/1126

EXAMINER

JOHN P DELUCA  
WATSON COLE GRINDLE WATSON PLLC  
10TH FLOOR  
1400 K STREET NW  
WASHINGTON DC 20005-2477

ENAD.E  
ART UNIT PAPER NUMBER

2834

DATE MAILED:

11/26/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/952,990

Applicant(s)  
Leijon et al.

Examiner  
Enad, Elvin

Group Art Unit  
2834



☒ Responsive to communication(s) filed on Oct 13, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1, 2, 5-8, 11, 13, 15-19, 21-43, and 45-55 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1, 2, 5-8, 11, 13, 15-19, 21-43, and 45-55 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2834

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,5-8,11 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 2 in view of Takaoka et al. (USP 5,094,703).

Applicant disclosed prior art figure 2 discloses the claimed invention except for a teaching of having the electrical cable comprised of a plurality of an uninsulated stranded conductor and an insulated stranded conductor

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the windings of Applicant Disclosed Prior Art Figure 2 comprising of insulated and uninsulated electrical conductor strands since such a modification according to Takaoka et al. would reduce the amount of insulation needed and the number of electrical connections required in the end windings.

Art Unit: 2834

3. Claims 15-19,21-28,32-43 and 45-55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 2 in view of Takaoka et al. (USP 5,094,703) and further in view of Elton et al. (USP 5,036,165).

Applicant disclosed prior art figure 2 and Takaoka et al. disclose the claimed invention except for utilizing a cable in the electrical machine having conductors with semiconducting properties.

Elton et al. teach that it is known to have an electrical cable comprising an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with the cable conductor. In another form of embodiment, Elton et al. teach an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator with a predetermined reference potential.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the cable assembly of Elton et al. to the device as disclosed in prior art figure 2 since such a modification according to Elton et al. would provide a conductor which prohibits the development of corona discharge.

4. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients

Art Unit: 2834

since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

5. Claims 29-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 2 in view of Elton et al. (USP 5,036,165) and further in view of German Patent Specification No. 468,827.

Applicant Disclosed Prior Art Figure 2 and Elton et al. disclose the claimed invention except that they do not disclose having a stator comprising slot(s) consisting of a number of cylindrical openings separated by narrow waist parts.

German Patent Specification No. 468,827 teaches that it is known to have a stator having cylindrical opening winding slots with decreasing radius in order to accommodate the winding conductors having varying diameters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the stator slot arrangement as taught by German Patent Specification No. 468,827 and to have modified the device as discloses by Applicant Disclosed Prior Art Figure 2 since such an arrangement according to column 1, lines 25-29 of German Patent Specification No. 468,827 would accommodate the conductors having varying diameters.

Art Unit: 2834

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:00PM.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for this Tech Center is (703) 305-3431(32).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Elvin Enad  
Primary Examiner  
Art Unit 2834  
11.18.99